



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,287	01/18/2002	Leo G. Nickoladze	064828-014	7223

7590 08/26/2003

Craig A. Gelfound
McDermott, Will & Emery
34th Floor
2049 Century Park East
Los Angeles, CA 90067

EXAMINER

MULLINS, BURTON S

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,287

Applicant(s)

NICKOLADZE ET AL.

Examiner

Burton S. Mullins

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) 4-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2834

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the Office Action of 16 January 2003 is acknowledged. Claims 4-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention (Group II), there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satake et al. (US 5,285,124) in view of Satake (US 4,785,213). Satake '124 teaches an induction motor comprising two rotors 31 and 32 co-axially arranged on a shaft 10 (Fig.3), a first one of the rotors 31 having a first winding 33 (Fig.1) and a second one of the rotors 32 having a second winding 34 (Fig.1), said first winding 33 being coupled to the second winding 34 with reverse electrical polarity (Fig.1); two stators 21 and 22 (Fig.1), each of the stators 21 and 22 being co-axially arranged around a different one of the two rotors 31 and 33 (c.6, lines 8-line 11);

Satake '124 differs in that one of the stators is not mounted for rotation relative to the other stator.

Art Unit: 2834

Satake '213 teaches a similar dual stator/rotor machine in which either one or both of the stators 24 and 25 are rotated by a pulse motor 35 to shift phases and obtain stable torque over a wide range of motor speeds (c.10, line 40-c.11, line 32).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Satake '124 and provide stators mounted for relative movement per Satake '213 for the purpose of shifting phases and obtaining stable torque over a wide range of motor speeds.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satake '124 and Satake '213 as applied to claim 1 above, and further in view of Chalmers et al. (US 3,757,182). Neither Satake '124 nor Satake '213 teaches a capacitor connected to the first rotor winding.

Chalmers teaches a synchronous ac motor including a rotor with windings 18-20 (Fig.6), wherein the winding 18 is connected to a control circuit (Fig.11) having capacitor 64 for smoothing voltage rectified by a bridge rectifier 63 (cl.7, lines 7-31). This arrangement is particularly suitable for variable supply frequency applications.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Satake '124 and Satake '214 and provide a capacitor coupled to the first rotor winding per Chalmers for the purpose of smoothing rectified voltage.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In particular, Nickoladze '689 teaches an AC generator comprising: two rotors 15

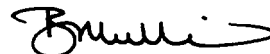
Art Unit: 2834

and 35 co-axially arranged on a shaft 30 (Fig. 1), a first one of the rotors 15 having a first winding (not numbered; having terminals 16/17 in Fig. 1) and a second one of the rotors 35 having a second winding (not numbered, having terminals 36/37 in Fig. 1), said first winding being coupled to the second winding with reverse electrical polarity (c.3, lines 39-44); two stators 11 and 12 (Fig. 1), each of the stators 11 and 12 being co-axially arranged around a different one of the two rotors 15 and 35 (Fig. 1); and wherein one of the stators 11 is mounted for rotation relative to the other stator 12 by means of a servo arrangement which shifts the stator 11 in angle relative to stator 12 (c.3, lines 64-68; Figs. 1-3).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 305-7063. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.



Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
August 21, 2003